

12 Social-control processes and the internalization of social values: an attributional perspective

Mark R. Lepper

To internalize: to incorporate (as values, patterns of culture, motives, restraints) within the self as conscious or unconscious guiding principles through learning or socialization

To comply: to conform or adapt one's actions (as to another's wishes)

Webster's Third New International Dictionary

Among both social and developmental psychologists there is a long history of concern with the distinction between "internalization" and "compliance" and the factors that promote both processes. Equally long, however, is the history of isolation that has existed between researchers considering these issues within the two camps. The goal of this chapter is to consider some points of convergence and divergence between these historically distinct research traditions. Its particular focus is on the implications of recent social-psychological research on the potentially adverse effects of functionally superfluous social controls for our understanding of the socialization process.

Processes of attitude change

Consider first the distinction between different processes of social control, or attitude change, in the social-psychological literature. Although

Preparation of this chapter was supported, in part, by Research Grants HD-MH-09814 from the National Institute of Child Health and Human Development and BNS-79-14118 from the National Science Foundation. The report was begun during the author's term as a Fellow at the Center for Advanced Study in the Behavioral Sciences, Stanford, California, and financial support for this Fellowship from National Science Foundation, Grant BNS-78-24671, and the Spencer Foundation is gratefully acknowledged. In preparing this chapter the author benefited greatly from conversations with John Condry, Tom Gilovich, and Eleanor Maccoby and from insightful and detailed comments graciously provided by Joan Grusec and Diane Ruble.

M. R. Lepper

the basic distinction can be easily traced to some of the earliest experimental demonstrations in Kurt Lewin's group dynamics laboratory (e.g., Lewin, Lippitt, & White, 1939), the most analytic treatment of the issue arises in Kelman's (1958, 1961) discussion of three processes of attitude change: compliance, identification, and internalization. Although each process may produce apparent attitude change, Kelman suggested, the three may be distinguished by the range of subsequent situations in which the individual will voice, or behave in accord with, these same attitudes. In the case of "mere" compliance, the individual will voice a given value or opinion only when it is instrumentally relevant to do so, that is, when the individual expects to attain particular rewards or avoid particular punishments by adopting that specific attitude. In later situations in which the behavior is no longer seen as instrumental, however, the individual will be expected to respond quite differently. In the case of identification, attitude change and congruent behavior will persist so long as the agent of social influence whom the individual wishes to emulate remains salient to the person but will dissipate when the link between "source" and "action" is no longer obvious or salient. By contrast, internalized attitudes may be expected to influence behavior across a variety of situations, exerting effects on behavior and values that are independent of momentary changes in the instrumental value of the behavior or the salience of the source. Such attitudes, therefore, may influence behavior even when the individual is seemingly free from external surveillance or coercion.

Behavioral changes of the third category, of course, form the conceptual goal of the socialization process. Parents seek to promote children's acceptance of values and patterns of behavior that will lead them to behave in an appropriate manner not only at home, or under the watchful eyes of other adults, but also in other settings in which they alone are present to monitor and judge the appropriateness of their actions. Indeed, it is the shift from initially external forms of control to later internalized social-control mechanisms that is the hallmark of successful socialization (Aronfreed, 1968; Kohlberg, 1969, 1971; Maccoby, 1980).¹

Internalization versus compliance: some theoretical considerations

A central implication of this analysis is that the conditions that may be optimal for producing compliance and immediate functional control over another's behavior may not be the same as those most likely to produce subsequent internalization. In fact, these two goals may sometimes stand in conflict. Both the use of unnecessarily powerful, functionally superfluous techniques of social control to produce compliance and the use of

functionally inadequate social-control techniques that fail to produce initial compliance may frequently have long-term consequences contrary to the aims of the agent seeking to induce compliance. Let us consider the data relevant to such claims in terms of three interrelated classes of experimental paradigms: the effects of psychologically "insufficient," objectively insufficient, and psychologically "oversufficient" social-control attempts.

Psychologically "insufficient" justification

The term *insufficient justification* was initially presented within the cognitive dissonance tradition to describe the results obtained in studies of "forced compliance" (Festinger, 1957), which compared the effects of different levels of incentives, or threats, employed to induce compliance with a request to engage in some action that subjects would find initially unpleasant, aversive, or otherwise contrary to their personal attitudes (Aronson, 1966, 1969). The rubric included two basic paradigms yielding conceptually analogous results.

The first of these involved the basic paradigm first developed by Festinger and Carlsmith (1959), in which subjects were offered either quite minimal or substantially more attractive incentives to defend a position at variance with their prior attitudes. Here the basic dissonance prediction, and finding, was that subjects induced to engage in this counterattitudinal behavior in the face of rather minor external inducements were more likely to report subsequent attitudes in line with their public behavior than subjects induced to engage in this same behavior in the face of more desirable and salient external incentives. Subjects induced to behave in a manner inconsistent with their personal beliefs in the presence of psychologically "insufficient" justification for their actions, it was argued, would be motivated to provide further justification on their own for their attitude-discrepant behavior. One prime means of doing so, particularly under circumstances in which it would be difficult to "retract" one's overt actions, would be to revise their private attitudes to be more consistent with their public actions. By contrast, subjects induced to engage in the same actions in the presence of clearly sufficient and highly attractive incentives should find sufficient justification for their actions in these external pressures and consequently should have minimal motivation to change their initial attitudes. Over the years, a large number of studies consistent with this general model have been generated (cf. Fazio, Zanna, & Cooper, 1977; Wicklund & Brehm, 1976; Zanna & Cooper, 1976) and have made reasonably clear the con-

ditions under which these "reverse incentive" effects are most likely to occur: conditions in which individuals consider themselves to have had free choice in engaging in the action and to be personally responsible for the consequences of that action (Calder, Ross, & Insko, 1973; Collins & Hoyt, 1972; Wicklund & Brehm, 1976).

The second basic "insufficient justification" paradigm examined the other side of the coin: the case in which the agent of influence is attempting to induce compliance with a request *not* to engage in an inherently unattractive or unpleasant activity. The initial prototypic study in this area, reported by Aronson and Carlsmith (1963), involved the "forbidden toy" procedure. In this study children were prohibited from playing with a particularly desirable toy under threat of either a relatively mild or a considerably more severe punishment for transgression. Again, the prediction was quite clear: Subjects complying with this request in the face of only rather minimal external pressure would be more likely to "internalize" this prohibition. They should express more negative attitudes toward the activity itself and should avoid the activity in later settings in which it was no longer explicitly prohibited. In this initial experiment, as well as a variety of further studies along these lines (e.g., Freedman, 1965; Lepper, 1973; Lepper, Zanna, & Abelson, 1970; Pepitone, McCauley, & Hammond, 1967; Zanna, Lepper, & Abelson, 1973), such effects were observed. Children who had initially resisted the temptation to engage in this desirable activity under mild threat proved more likely on later testing to express negative evaluations of the activity and to avoid engaging in the previously forbidden activity even in subsequent situations in which the prohibition was no longer in force. This effect appears reliable, robust, and reasonably durable over intervals of several weeks.

In both cases the data suggest an inverse relationship between the salience of the external pressures applied and the likelihood of subsequent attitude change congruent with the presumed intent of the agent of influence. The basic findings from these two paradigms are represented schematically by the *solid lines* on either side of Figure 1, where the two "X's" along the abscissa represent the hypothetical points at which the external pressures applied to induce the person either to engage in a particular action (on the far right-hand side of the figure) or to refrain from engaging in a particular action (on the far left-hand side of the figure) would be *just sufficient in a specific setting* to elicit compliance from the individual (or, in the experimental studies, from the entire group). Beyond this point, the model suggests, increases in the amount or salience of external pressure will result in less private attitude change, or internalization of the values or attitudes underlying the initial request—

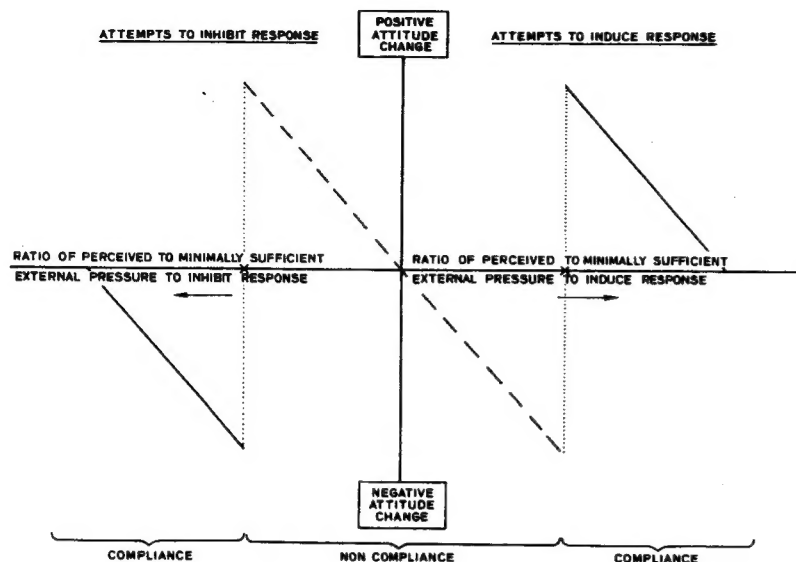


Figure 1. Hypothesized relationship between the salience of external pressures employed in an attempt to induce compliance, relative to the amount of pressure minimally sufficient to produce compliance, and resultant attitude change, as a function of actual compliance versus noncompliance. The right half of the figure refers to cases in which the goal of the influence attempt is to elicit a given response; the left half refers to cases in which the goal of influence is to suppress a given response. The dashed diagonal lines in the center of the figure represent the hypothesized relationship between external pressure and subsequent attitude change under conditions of objectively insufficient justification (i.e., in which the individual does not comply). The solid diagonal lines to the sides of the figure represent the hypothesized relationship between external pressure and subsequent attitude change under conditions of objectively sufficient, but psychologically "insufficient," justification (i.e., in which the individual does comply). The two points marked on the abscissa with "X's" represent the hypothetical points at which the external pressure applied in a particular case is just sufficient to produce actual compliance.

that is, less positive change in the case of induced action and less negative change in the case of induced restraint.²

Objectively insufficient justification

These effects of psychologically "insufficient" justifications, of sufficient objective power to produce actual compliance with the initial request, may be contrasted with the effects of social-influence attempts that are

objectively insufficient—that is, that are not successful in producing initial compliance. For these cases, the model predicts quite opposite effects, illustrated schematically by the *dotted lines* in Figure 1. Here the more pressure one applies, without success, to induce initial compliance, the more likely that influence attempt is to have effects opposite to those intended, producing changes in attitudes (and presumably in related behaviors) in the other direction. Again, there are two basic cases: The first involves attempts to persuade an individual to engage in an activity he or she would not spontaneously approach, and the second attempts to dissuade the individual from engaging in an activity he or she would be likely to approach in the absence of external pressures. Again, there are some, although considerably fewer, experimental findings to support these theoretical contentions.

In this instance, the experiment best approximating the paradigmatic case represented in the inside left half of the figure—involving the effects of the introduction of external "costs" to engagement in an activity of initial interest to subjects—is well known, though perhaps not in this context. It is the early study by Aronson and Mills (1959) on the effects of severity of initiation on subsequent attitudes toward the group. In this experiment, subjects motivated to engage in a particular action (i.e., to join a particular group) find themselves faced with either relatively mild or considerably more substantial external pressures that would lead them not to undertake this action (i.e., the requirement that they undergo either a mild or a severe initiation in order to be able to join this group). Here, in contrast to the preceding studies, these external pressures are in both cases objectively insufficient to deter subjects, who proceed to undergo the initiation procedure and become members of the group. In this case, the effect of the presence of relatively more powerful or salient external pressures is, of course, to increase the inconsistency of subjects' actions. The result was the predicted enhancement of subjects' personal evaluations of the activity in the severe initiation condition relative to the mild initiation condition, a finding that is conceptually the opposite of that obtained when objectively sufficient, but psychologically "insufficient," external deterrents to action are employed. Although early discussions focused on methodological difficulties with this initial study, the basic finding appears to be replicable, even when the alleged deficiencies are corrected (e.g., Gerard & Mathewson, 1966).

Turning to the dotted line on the right half of Figure 1, by contrast, readers familiar with the early history of this research will notice a "missing cell": the case in which external incentives are employed to induce the person to engage in an activity that would otherwise be avoided, but in

which the attempt is unsuccessful. Only recently has this remaining case received investigation in a study reported by Darley and Cooper (1972). Briefly, these authors attempted to induce students to engage in a counter-attitudinal behavior (i.e., writing an essay discrepant with their attitudes) through the offer of either a quite small or a relatively larger financial reward (i.e., 50 cents vs. \$2.50). These inducements were offered in a context, however, in which all subjects refused to engage in the activity, choosing to forgo the proffered reward. Consistent with the analysis underlying the previous studies, these investigators found that subjects who had refused to comply with the request in the face of an external inducement to do so showed an adverse effect of this attempt to influence their behavior. Subjects' attitudes retreated from the position they had been asked to advocate and did so significantly more the greater the external incentive they had forgone by refusing to comply.

Certainly, the experimental evidence in this area is much more scanty than in the case of the classic "insufficient justification" paradigms. It seems sufficient to indicate, however, that increases in the external pressures employed to induce initial compliance have very different effects on later attitude change or internalization, as a function of whether the attempt to influence subjects' behavior is initially successful or unsuccessful.

These basic paradigms all derived initially from a cognitive dissonance model. Over the last decade, however, it has become clear that these findings could also be reinterpreted in terms of an attributional, or self-perception, framework (Bem, 1967, 1972; Kelley, 1967, 1973). In this model, the results just described are seen as the result of an attributional process in which subjects may be led to conceptualize their reasons for engaging, or refusing to engage, in a particular action in terms of either intrinsic versus extrinsic or endogenous versus exogenous motives (cf. Kruglanski, 1978; Lepper & Greene, 1978c).

To the extent, this reanalysis suggested, that the external constraints and incentives controlling one's actions are salient, unambiguous, and sufficient to explain those actions, the person will be likely to attribute those responses to these compelling external pressures. If, by contrast, the external contingencies and pressures in a particular setting are seen as weak, unclear, or psychologically "insufficient" to account for one's actions, the person will be likely to attribute those actions to personal attitudes, dispositions, or interests. Hence, under low justification conditions, subjects will be likely to view prior compliance as reflective of their own preferences, standards, or dispositions but noncompliance as a "natural" response to minimal external incentives. Under high justification conditions, however, subjects will be more likely to see prior compliance

as a response to strong extrinsic constraints and pressures inherent in the situation but noncompliance as indicative of personal preferences and dispositions.

Psychologically "oversufficient" justification

Without entering the continuing debate concerning the relative merits of the dissonance and attribution accounts of these prior studies (cf., Fazio, Zanna, & Cooper, 1977; Greenwald 1975) it seems clear that this attributional account has had the important heuristic advantage of suggesting that conceptually analogous effects might be observed in a third set of cases, those involving the use of overly sufficient justification. As detailed elsewhere (Lepper, 1981; Lepper & Greene, 1978b, 1978c), this account suggested that the use of unnecessarily powerful or salient (i.e., functionally superfluous) extrinsic constraints might undermine subsequent intrinsic interest in the activity to which those constraints had been applied.

More specifically, in our own work, this analysis suggested the following hypothesis: If a child could be induced to view his or her engagement in an activity of initial intrinsic interest as an explicit means to some ulterior goal, the child's subsequent intrinsic interest in the activity, in the later absence of further extrinsic pressures or constraints, may be undermined by the prior imposition of salient, but functionally superfluous, extrinsic constraints. To emphasize the conceptual parallels between this hypothesis and the previous work considered earlier, we termed this proposition the *overjustification* hypothesis.

In our initial paradigmatic study in this area (Lepper, Greene, & Nisbett, 1973) we sought to test this hypothesis in an ecologically representative classroom setting that provided an appropriate laboratory for assessing "intrinsic" interest behaviorally. To do so, we began by observing covertly (from behind a one-way mirror) children's approach to a particular experimental activity in their regular preschool classrooms during a series of explicitly designated "free-play" periods in which children were allowed and encouraged to choose freely from among some 30 or 40 available alternatives. We selected as subjects for our study only those children showing an initial interest in our target activity. These children were then seen in individual experimental sessions in a different setting and were asked to engage in this same activity under one of three conditions. Expected Award subjects were first shown a sample extrinsic reward—a "Good Player" certificate—and were asked if they would like to win such a prize. These subjects were then informed that to win this award they would have to engage in the target activity;

all these children agreed to undertake this activity in order to obtain the extrinsic reward. To control for the effects of the association of the activity with a reward and the receipt of a reward per se, Unexpected Award subjects were asked to engage in the activity without promise or mention of any tangible reward but subsequently received the same reward and feedback from the experimenter unexpectedly. Finally, children in a Control condition were simply asked to engage in the same activity without knowledge or receipt of any tangible reward. Several weeks later, children's intrinsic interest in the target activity was again observed in their classrooms under conditions in which subjects had no knowledge that their behavior was being monitored and no expectation of further extrinsic rewards or external pressures contingent upon task performance. In this setting, children who had previously undertaken the activity to obtain a reward showed significant decreases in intrinsic interest, relative both to their own behavior during the base-line period and the behavior of subjects in the other two conditions. The use of unnecessarily salient extrinsic incentives, it appeared, had undermined children's intrinsic interest in the activity per se.

Over the last five years these findings have received considerable experimental scrutiny, and a rather substantial body of research is now available that provides evidence concerning the conditions under which such detrimental effects are, and are not, likely to occur (Condry, 1977; Lepper, 1981; Lepper & Greene, 1978b). Briefly, there is a good deal of data to suggest that such effects depend to a large extent on whether the child perceives his or her actions as being extrinsically controlled (Lepper, 1981). Thus, detrimental effects appear likely to occur only when the child's actions can be reasonably seen as having been directed toward the attainment of some extrinsic goal—when the proffered rewards are, for example, expected in advance but not when they are unexpected (e.g., Enzle & Look, 1980; Lepper & Greene, 1975; Lepper, Greene, & Nisbett, 1973; Lepper, Sagotsky, & Greene, 1982a, 1982b; Smith, 1976) or when the rewards are contingent upon task engagement but not when task engagement is merely incidental to reward attainment (e.g., Ross, Karniol, & Rothstein, 1976; Swann & Pittman, 1977). Similarly, cognitive “set” manipulations that focus the subjects’ attention on the instrumentality of their actions appear to enhance the probability that detrimental effects will be observed, whereas manipulations that focus subjects’ attention on the inherent value of the activity even in the face of an expected reward appear to decrease the likelihood of such effects (Johnson, Greene, & Carroll, 1980; Pittman, Cooper, & Smith, 1977).³

Adverse effects of superfluous extrinsic constraints on subsequent in-

trinsic interest, moreover, do not seem to depend upon the use of rewards per se but can also be shown to occur following the imposition of other forms of external constraint, such as unnecessarily close surveillance (e.g., Lepper & Greene, 1975; Pittman, Davey, Alafat, Wetherill, & Wirsul, 1980), expectation of external evaluation (Amabile, 1979; Maehr & Stallings, 1972), or functionally superfluous temporal deadlines (Amabile, DeJong, & Lepper, 1976). Indeed, even the imposition of a purely nominal contingency—for example, “You must do *x*, in order to be able to do *y*”—between two activities of equal and high initial intrinsic interest appears to decrease later interest in the activity presented as a “means” to obtaining a chance to play with the other (Lepper, Sagotsky, Dafoe, & Greene, 1982).

As with the preceding literatures on psychologically “insufficient” and objectively insufficient justification, however, these studies represent only one of two salient prototypes involving the use of overly sufficient external pressure: the case in which one is attempting to induce the subject to engage in a particular behavior. On theoretical grounds, of course, it should also be possible to observe detrimental effects of psychologically “oversufficient” justification in contexts in which one is attempting instead to prevent the person from engaging in a particular action or activity.

In contrast to the relatively large literature just described, this second possibility has received virtually no experimental attention. Only one study from our own laboratories seems to speak even obliquely to this issue (Lepper, 1973). In this study, our principal concern was with the potentially generalized effects of prior resistance to temptation, under either a mild or a severe threat of punishment for transgression, on later resistance to temptation in a quite different setting. This interest arose initially from anecdotal observations of a curious tendency for children who had undergone the mild threat procedure in the traditional “forbidden toy” paradigm outlined earlier to engage in overtly self-congratulatory or self-justificatory statements following the temptation period (i.e., to offer spontaneous comments on the fact that they had “been good” or had done “just what” the experimenter had asked them to do).

To investigate the possibility that such responses might reflect a process of self-justification that would have consequences for their behavior in a very different subsequent situation, we first exposed children to a version of the Aronson and Carlsmith (1963) procedure, in which they were prohibited from playing with a highly attractive toy under either mild or severe threat of punishment for transgression or, in a control condition, were not exposed to a temptation situation at all. When children's atti-

tudes toward the previously forbidden toy were assessed following the temptation period, the standard finding of greater devaluation of the prohibited activity under mild threat conditions was replicated. To examine the more generalized effects of exposure to this procedure, however, these same children were also observed in a second experimental setting, several weeks later. This session took place in a different location and involved a different and ostensibly unrelated experimenter and a different set of activities. In this second session, the children were presented with a quite different, but traditional, measure of resistance to temptation. Specifically, they were asked to play a game in the experimenter's absence to see if they could attain a sufficiently high score to obtain their choice of a set of highly attractive prizes. The game, of course, was secretly preprogrammed so that all children would receive a score that fell slightly short of that needed to win a prize. The measure of interest in this second setting was the likelihood that children in the different conditions would falsify their scores so as to claim a prize. In contrast to the first experimental session, in which care was taken to ensure that all subjects would actually comply with the experimenter's prohibition, this second session was deliberately designed to provide a sufficiently attractive set of rewards and a sufficiently minimal probability of detection so that a substantial proportion of the subjects would actually transgress.

The study, therefore, allowed us to examine the effects of prior compliance with an adult prohibition, under either minimal or unnecessarily powerful and salient extrinsic pressures, on later compliance with a quite different prohibition in a functionally separate setting. The results, from the present perspective, were quite informative. Children who had previously resisted temptation in the face of only relatively mild extrinsic pressures proved significantly more likely than control subjects to resist temptation as well in this later dissociated context. Children who had initially resisted temptation in the face of overly powerful, and functionally superfluous, extrinsic pressures tended to show quite the opposite effect, that is, to be less likely than control subjects to resist temptation in this later different setting. Prior compliance in the face of sufficient, but relatively minimal, extrinsic pressures, in more general terms, seemed to increase subsequent internalization or private acceptance of the standards implicit in the adult's initial request; prior compliance in the face of more salient extrinsic pressures seemed to decrease later internalization.

These findings concerning the potential deleterious effects of the use of overly powerful social-control techniques on later intrinsic interest or internalization in the subsequent absence of further extrinsic constraints, however, suggest an extension of our initial model. Although the repre-

sentation is not precisely accurate (e.g., if the action one wishes to induce is one that subjects would already display spontaneously in the absence of any external pressures, virtually any request should be sufficient to produce initial compliance),⁴ this extension is illustrated—again, in highly schematic terms—in Figure 2. At least in terms of the experimental literature, this figure suggests that the use of either objectively insufficient or functionally superfluous and psychologically oversufficient social-control techniques may prove counterproductive. The use of objectively effective, but psychologically “insufficient,” social-control procedures, on the other hand, appears likely to promote subsequent attitudes and behaviors that appear to reflect “internalization” of the values or standards underlying the initial social-influence attempt.

The minimal sufficiency principle: applications to socialization

These data, and the attributional model that underlies them, have potentially significant implications for our understanding of the socialization process and the ways in which different sorts of social-control techniques may influence the child's internalization of adult and societal values and standards of conduct. The following section will examine this argument in greater detail to explore both the possible strengths and the obvious deficiencies of such an analysis.

Clearly, the most straightforward derivation from this analysis is what I have termed elsewhere the *minimal sufficiency principle* of social control (Lepper, 1981). Techniques of social control that are successful in producing compliance, but are at the same time sufficiently subtle (rather than obviously coercive) to prevent the individual from viewing such compliance solely as a function of those extrinsic controls, will be most likely—other things being equal—to promote subsequent internalization. Figure 3 casts the present model in these broader terms and illustrates the parallels between attempts to induce and to inhibit response in terms of a common criterion of internalization. Here the ordinate has been reoriented so that “high” values in all cases represent change consistent with the aims of the social-influence attempt (i.e., more positive attitudes when the intent is to induce action, but more negative attitudes when the intent is to inhibit action).

The thesis, it should be noted, is purely relative. It does not lead one to expect that the use of overly powerful control techniques will always, or typically, produce adverse effects in any absolute sense. This model would not predict, for instance, that even the use of blatantly coercive social-control techniques to induce a child to learn to read or to play the

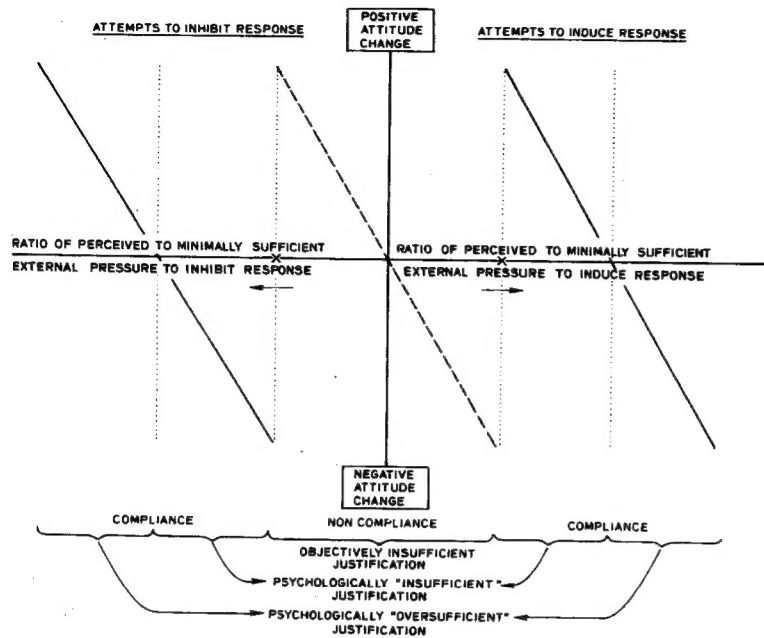


Figure 2. Hypothesized relationship between the salience of external pressures employed in an attempt to induce compliance, relative to the amount of pressure minimally sufficient to produce compliance, and resultant attitude change, under conditions of objectively insufficient justification, objectively sufficient, but psychologically "insufficient," justification, and psychologically "oversufficient" justification. The center of this figure is identical to Figure 1. The additional segments added to the extreme left and right of the figure represent the addition of the case of overly sufficient justification, in which the individual complies in the face of functionally superfluous and psychologically "oversufficient" external pressures.

piano would necessarily produce less interest in those activities than would have been the case had the child never attempted these activities. Other factors, such as the skills that children may acquire in the process of engaging in the activity itself or changes in children's perceptions of their own competence at the activity, will obviously also influence the absolute outcome of such a situation. The argument, more simply, is that if it were possible to elicit the same behavior from that child through the use of less salient or coercive techniques of control—that is, if the extrinsic pressures applied were truly unnecessarily powerful or salient—then those more subtle techniques of control would be expected to produce

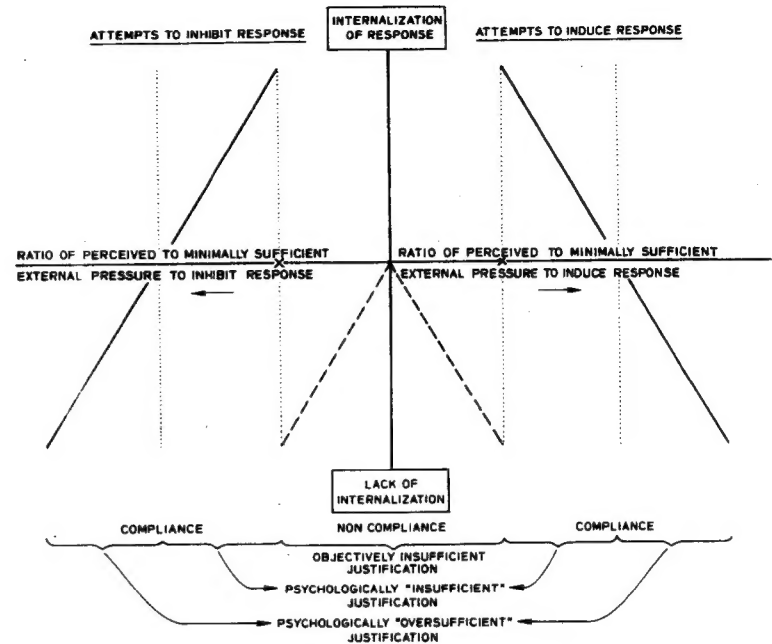


Figure 3. Hypothesized relationship between the salience of external pressures employed in an attempt to induce compliance, relative to the amount of pressure minimally sufficient to produce compliance, and subsequent internalization of the intent of the agent attempting to elicit compliance, under conditions of objectively insufficient justification, psychologically "insufficient," and psychologically "oversufficient" justification. High values on the ordinate at any point in this figure represent changes in attitudes or behavior consistent with the initial intent of the social-influence attempt.

more subsequent interest in the activity in the later absence of further extrinsic pressures or constraints.⁵

Stated in terms of these broader issues of social control, it seems evident that this model ought to have some application to traditional concerns in developmental psychology regarding the nature of discipline and control techniques that promote or impede internalization of adult moral and social values. Equally evident, however, is the fact that there has been virtually no contact between these two streams of research. Before considering the implications of this analysis for the study of socialization more fully, it may be worth taking a moment to consider the sources of this relative insulation. In part, there seems to have been confusion

among some developmental researchers concerning the quite different predictions one would make as a function of whether an influence attempt has been successful or not (e.g., Biaggio & Rodrigues, 1971). To a larger extent, however, this insulation also seems to stem from the fact that the particular experimental paradigms that have been most thoroughly studied are often quite far removed from their possible socialization analogues. Typically, these studies have employed highly complex and ecologically atypical experimental settings, have relied on attitudinal, rather than behavioral, measures of subsequent effects, and have focused on adult subject populations.

Moreover, in two cases, the studies presented earlier as illustrative examples clearly do not represent the most obvious or direct test of the specific hypotheses of interest to students of socialization. Instead, they involve the most clearly related paradigms to have received experimental investigation. In the case of the Aronson and Mills (1959) "severity of initiation" paradigm, for example, it is clear that subjects did not perceive the experimenter as desiring to inhibit them from engaging in an otherwise attractive activity. A much more direct test of the effects of objectively insufficient justification for response inhibition, therefore, might involve a study in which children were explicitly offered either a relatively small or a somewhat more substantial incentive not to engage in a particular activity, but in which the activity itself was sufficiently attractive so that neither incentive would be sufficient to induce the children to resist the temptation to engage in it. Similarly, the Lepper (1973) study does not represent the most obvious example of the use of oversufficient justification to inhibit a response. A more direct analogue to previous overjustification research, for the case in which one wishes to inhibit a particular response, might involve instead a comparison of the effects of mild versus severe threats of punishment for engaging in an activity that the child would already prefer to avoid. In both cases, the proposed analysis implies that the results of these more direct studies should be comparable to those obtained in the experiments discussed. Whether this is true is, of course, an empirical question. One function of this chapter is to indicate the sorts of data one might need to collect to support this argument. For the moment, however, let us accept these implicit assumptions in the model and consider its possible applicability to the study of socialization processes.

Applications to previous socialization research

Perhaps the most obvious previous literature to which the present analysis should be relevant is that concerning the effects of different types of

parental disciplinary or social-control techniques on children's internalization of social and moral values, as indexed by their behavior and attitudes outside the home situation in which these control techniques were initially applied. The simpleminded prediction, from an attributional perspective, is that the use of unnecessarily powerful and salient techniques of control to produce compliance with parental demands at home should result in less internalization of the values underlying those demands. As a result, children should be less likely to behave in accord with those demands in other settings in which the child's behavior is no longer perceived to be under direct parental surveillance or control. An examination of the relevant socialization literature provides some evidence consistent with such a claim.

Consider first the elegant research on children's internalization of moral values that has been carried out over the last dozen years by Hoffman and his colleagues (Hoffman, 1970a, 1970b, 1975a, 1975b; Hoffman & Salstein, 1967). In this work, Hoffman and his associates have distinguished three sorts of disciplinary techniques that parents might apply in training children to behave in socially or morally acceptable ways at home: power-assertion, love-withdrawal, and induction. Power-assertion includes physical punishment, deprivation of material objects or privileges, and other direct applications of force or authority. Love-withdrawal involves the use of techniques of social control that express parental disapproval or anger directly but nonphysically, such as ignoring, isolating, or stating a dislike for the child. Induction involves techniques in which the child is presented with explanations or reasons why the behavior is unacceptable, including procedures that make clear to children the consequences of their actions for others involved. The most general conclusion to emerge from the study of these different disciplinary practices (cf. Hoffman, 1970b) is that the use of highly controlling, power-assertive techniques appears to decrease subsequent internalization; whereas the use of more subtle and less punitive inductive techniques seems to promote later internalization. The effects of love-withdrawal techniques, representing a theoretically intermediate case, seem somewhat more varied, frequently showing no relationship to later internalization but sometimes showing small positive effects on subsequent attitudes or behavior in other settings.

Though obtained in a quite different and considerably more complex setting, these findings are consistent with the attributional model described here. Although these studies do not provide direct data on the ways in which children view these different sorts of control techniques, it is clear that there are several reasons why power-assertive techniques should be most likely, and inductive techniques least likely, to promote

extrinsic attributions for compliance. First, it seems generally clear that social-influence attempts that rely on verbal persuasion will be less likely to provoke perceptions of constraint than influence attempts that rely upon more tangible and visible incentives or sanctions (Lepper, 1981). Second, inductive techniques frequently seem to imply a belief on the parent's part that the child would not have behaved, or want to behave, in an undesirable manner if the consequences of such actions or if the reasons underlying the rules and standards imposed were fully understood. Conversely, power-assertive techniques often appear to include explicit statements that indicate that the reason for complying with an adult request is to avoid arbitrary and external sanctions (e.g., "You'll do that because I told you to, and if you don't . . ."). Love-withdrawal techniques, by contrast, appear somewhat more variable along all these dimensions and therefore form a theoretically more ambiguous case. Hoffman's data, therefore, would support the conclusion that more direct, salient, and psychologically unambiguous techniques of control appear to produce less subsequent internalization of the standards and values they were initially designed to promote.⁶

A similar analysis might also be applied to the extensive observational studies conducted by Baumrind and her associates (1967, 1971a, 1972, 1973; Lamb & Baumrind, 1978) on the effects of different parenting styles on children's social responsibility, as indexed by their behavior outside the home situation in which these practices are implemented. To simplify, once again, a complex typology, Baumrind distinguished three parenting styles: authoritarian, authoritative, and permissive. In this analysis, the authoritarian parent "values obedience as a virtue and favors forceful, punitive measures to curb self will"; the permissive parent favors a strategy of few demands or restrictions on the child's behavior and believes the parent should "behave in an affirmative, acceptant, and benign manner"; whereas the authoritative parent "attempts to direct the child's activities in a rational, issue-oriented manner," generally employing firm, but fair and less overtly punitive, techniques of discipline (Baumrind, 1972). In terms of children's later social responsibility, the effects of these practices were clear: Children from authoritative homes showed significantly greater social responsibility than children from homes in which parents employed either authoritarian or permissive practices.

The difference between the effectiveness of authoritarian and authoritative practices, of course, conceptually parallels the results obtained by Hoffman on the relatively positive effects of inductive disciplinary techniques and the relatively adverse effects of power-assertive control tech-

niques. In an attributional model, both are seen as reflective of the difference between the use of objectively sufficient and necessary techniques of control and the use of overly salient and psychologically "oversufficient" control techniques. The relative ineffectiveness of permissive parenting styles, by contrast, more closely resembles the case in which objectively insufficient social-control procedures are attempted, at least to the extent that these parents do have values and standards that they wish their children eventually to acquire. Again, these results are generally consistent with an attributional analysis.

These findings, and the results of other naturalistic studies suggesting that the use of unnecessarily powerful or salient social-control techniques may prove ultimately dysfunctional (e.g., Lytton, 1977; Sears, Maccoby, & Levin, 1957; Sears, Rau, & Alpert, 1965), provide evidence supporting the potential relevance of the proposed attributional analysis to traditional socialization research. At the same time, it is evident that the sorts of complex child-rearing patterns examined in these studies involve a considerable array of potentially significant differences in parental behavior. Indeed, it seems highly likely that the long-term effects of these patterns are the result of the joint operation of a number of conceptually differentiable processes (Hoffman, 1970b). Thus, the argument is not that the present analysis provides a comprehensive account of the effects observed in these naturalistic studies. Instead, the argument is simply that attributional processes may form one important class of factors that contribute to these effects.

To obtain more direct support for such an analysis, obviously, requires a return to a more experimental research approach in which potentially confounding factors can be held constant by experimental design. In part, the research reviewed earlier, at least in those cases where the possible socialization analogs are clear (e.g., Lepper, 1973), may serve this function. Let us consider, however, another line of recent experimental work that has examined the consequences of more direct manipulations designed to induce children to label their behavior either in terms of salient external pressures to which it was a response or as a reflection of internalized standards or attitudes.

Although this literature is quite recent, there are now several studies that suggest that inducing children to think about their actions in internalized, instead of external, terms may make it more likely that they will subsequently show behavior change in accord with the intent of the initial influence attempt in later situations in which those controls are no longer present. Dienstbier, Hillman, Lehnhoff, Hillman, and Valkenaar (1975), for example, showed that labeling a child's emotional reaction following

an unavoidable transgression as either an indication of the child's upset at being caught or an indication of the child's upset at failing to do the assigned task properly led to significant differences in children's subsequent behavior in a later, comparable situation in which the possibility of detection of any transgression was eliminated. Labeling the child's previous response as a reaction to detection led to less subsequent internalization than labeling that prior response as an indication of an internalized reaction to transgression. In a similar vein, Grusec and her colleagues (Grusec, this volume; Grusec, Kuczynski, Rushton, and Simutis, 1978) have shown that providing children with a self-attribution for their altruistic behavior produced enhanced internalization and generalization of altruistic behavior to a different setting, compared to groups given no specific attributional set or given an external attribution for their behavior. Other studies of the effects of labeling the individual's behavior in internal terms (e.g., Kraut, 1973; Miller, Brickman, & Bolen, 1975; Perry, Perry, Bussey, English, & Arnold, 1980; Toner, Moore, & Emmons, 1980) suggest similar conclusions.

Taken together, these findings suggest that the effectiveness of different socialization techniques in producing later internalization of the standards and patterns of behavior parents are attempting to teach children may depend, in part, on the manner in which different social-control procedures affect children's perceptions of their reasons for having engaged in related actions or activities in the past.

Implications for further research

Perhaps the most general implication of this analysis is simply that the study of socialization processes may benefit substantially from a more direct focus on children's interpretation of social-control techniques applied to them and the attributions they make about their own behavior. To assess these processes more directly will require considerable ingenuity; indeed, some might argue that the task is inherently intractable (e.g., Nisbett & Wilson, 1977). More direct analyses of this sort may well reveal, however, attributional processes involved in the socialization process on many levels. As children mature, for example, it may become important not only whether they see their particular actions in internal versus external terms but also why they perceive their parents or others as attempting to control and modify their behavior. It may make a considerable difference whether the child views a particular request or prohibition as an arbitrary attempt to make the parent's own life easier or as a legitimate response dictated by the parent's perception of the child's own best interests. Such effects are likely to depend, moreover, on the impor-

tant developmental changes Damon (1977) has shown to occur in children's perceptions of adult authorities and the factors that legitimize their rules and requests. In addition to this general focus on children's interpretation of social-control techniques in the socialization context, however, there are a number of other, more specific issues that the present approach raises.

Escalation and de-escalation of social control. Consider, for example, the effects of a child's initial compliance or noncompliance with a particular request on the course of later attempts to induce the child to comply with the same or some similar request. Initial compliance, the present analysis suggests—unless the extrinsic pressures applied to induce that compliant response are overly powerful or salient—should make subsequent compliance along similar lines more probable. Conversely, initial noncompliance should make subsequent compliance with the same request less probable. Put in somewhat different terms, a successful attempt at social control should make the parent's subsequent task easier—that is, less pressure should be required on the next occasion to produce further compliance—whereas an unsuccessful attempt at control should make the parent's subsequent task harder—that is, even greater extrinsic pressures will be required to produce compliance with a further request of the same sort (cf. Mills, 1958).

Consistent with the first half of this analysis, that initial compliance breeds further compliance, are some of the data already described. Recall, for instance, the finding (Lepper, 1973) that children who initially resist temptation in the face of a relatively mild threat of punishment are more likely than control subjects to subsequently resist temptation in a different setting in the face of even less obvious external pressures. Additional support for this proposition can also be found in the social-psychological literature on what has been termed the *foot-in-the-door* effect (cf. DeJong, 1979). In these studies, with adult subjects, it has been repeatedly shown that inducing compliance, using minimal external pressure, with a small and seemingly trivial initial request may substantially enhance the probability that subjects will later comply with a much larger request along similar lines, even in a different context and from a different individual (e.g., Cann, Sherman, & Elkes, 1975; Freedman & Fraser, 1966; Pliner et al., 1974; Snyder & Cunningham, 1975; Uranowitz, 1975; Zuckerman, Lazzaro, & Waldgeir, 1979). Moreover, such effects are less likely to appear, as one would predict, when more powerful justifications are employed to produce initial compliance (Lepper, 1973; Uranowitz, 1975; Zuckerman, Lazzaro, & Waldgeir, 1979).

Much less attention has been devoted to the other side of this argu-

ment—that initial noncompliance may enhance resistance to further compliance—although the phenomenon is one of considerable relevance to the socialization context and illustrates clearly the fine line that parents continually walk. Examples of the basic effect are easy to generate. The parent approaches the child with a relatively simple request and the child refuses to comply; to press the issue and obtain compliance from the child, at this point, the parent will theoretically be forced to use significantly more powerful control techniques than would otherwise (i.e., in the absence of a prior refusal on the part of the child) have been sufficient to produce initial compliance. Experimental evidence concerning this predicted escalation of social coercion following the initial use of objectively insufficient external pressure is sparse (cf. Cann, Sherman, & Elkes, 1975; Snyder & Cunningham, 1975), but the process seems anecdotally familiar from naturalistic studies of children's obedience in the home (e.g., Minton, Kagan, & Levine, 1971; Patterson, in press) or at school (Landauer, Carlsmith, & Lepper, 1970). Clearly, however, this process deserves more systematic experimental attention.⁷

The exercise of subtle social control. In a related vein, a second general focus of the present analysis concerns the issue of how to achieve control over a child's behavior without leading the child to see such behavior as exclusively attributable to external forces—the study, in a sense, of the psychology of subtle social control. In an early analysis of the manner in which classic “insufficient justification” studies achieve this effect, Kelley (1967) has pointed to a number of typical strategies employed to this end by experimental social psychologists: the labeling of a subject's behavior as the consequence of a “free choice,” the use of diffuse social pressures instead of tangible rewards and punishments, and so on. No doubt such techniques have their appropriate analogs in the social exchanges between parents and children. Mahoney (1974), for example, describes the use of a strategy for producing compliance by creating an “illusion of choice” (e.g., asking a child whether he wished to take his shower in the upstairs or the downstairs bathroom, presuming compliance in either case, rather than directly asking him to take a shower) that may be familiar to parents of many young children. One might expect, however, that the effectiveness of such explicitly manipulative procedures will diminish rapidly with their repeated use or with increased sophistication on the part of the child.

Perhaps more useful, and more significant, are strategies of social influence that involve providing children with increased levels of actual choice and control. Frequently, the introduction of even a small amount of

actual choice into a request for compliance (e.g., allowing children to decide when, but not whether, to do their homework) may often produce a greater sense of internal control, without sacrificing parental goals, than an unadorned request permitting no latitude of discretion (Condry & Chambers, 1978; Lepper & Greene, 1978c). In related contexts, there is some evidence that a “suggestive” approach may prove more effective than a more explicitly “directive” approach in producing behavioral persistence and an internal locus of control (e.g., Bee, 1967; Condry & Chambers, 1978; Loeb, 1975; Maccoby, 1980, and this volume; Rainey, 1965). Similarly, modeling a desired response, as opposed to simply dictating it, may often prove to have more positive effects on subsequent indices of internalization (cf. Rosenhan, 1969). Indeed, a direct examination of relative perceptions of choice and control produced by exposure to adult models versus direct requests might well prove useful in understanding when modeling procedures are, and are not, likely to prove superior to comparable direct instructions (e.g., Grusec, et al., 1978; Lepper, 1981; Lepper, Sagotsky, & Mailer, 1975). Finally, the technique of offering to share a task with the child (e.g., to help in cleaning up the child's room) would seem most likely to minimize the child's perception of external constraint.⁸

Other strategies for inducing initial compliance but minimizing perceptions of external constraint are more complex. Lepper and Gilovich (1982), for example, examined the effects of one such strategy—the use of what they termed activity-oriented requests—as a means of enhancing children's later compliance to other adult demands. Activity-oriented requests involve attempts to structure a task the child is asked to undertake in ways designed to emphasize the attractiveness of the activity itself. Thus, one might attempt to enhance interest in the task of doing long-division problems by presenting them in a context of greater intrinsic interest—computing, for instance, the batting averages of the school's baseball team. Or, one might attempt to increase the attractiveness of a household clean-up job by presenting it to children as a detective game or as part of a race. To the extent that such techniques may effectively focus children's attention on the activity itself and not its instrumental value, the present analysis would predict enhanced compliance in subsequent situations among children exposed to such techniques for eliciting prior compliance in a different setting. Lepper and Gilovich (1982) found that children exposed to such activity-oriented requests were more willing to comply with later requests by a different adult than children in appropriate control conditions in which initial compliance was produced with comparable more direct requests.

These issues deserve further investigation in more naturalistic contexts as well. What are the strategies that particularly effective parents, or teachers, use to elicit compliance without producing resistance and perceptions of constraint? Studies of the techniques that superior teachers use to sustain the learning and practice of repetitious tasks necessary for the acquisition of basic academic skills (cf. Bruner, 1962, 1966) may provide other suggestions for further research. In an analogous vein, it would be of great interest to study further the social histories of Baumrind's (1971b) "harmonious" families, in which social control is apparent but is seldom the source of controversy or even discussion.

Explicit training in self-control techniques. As a final example of the potential implications of the present analysis, let us consider a quite different set of issues raised by recent work in the area of contingency management: research concerning techniques for supplanting initially powerful external contingency systems with self-imposed contingency systems (e.g., Drabman, Spitalnik, & O'Leary, 1973; Turkewitz, O'Leary, & Ironsmith, 1975).

Consider a paradigmatic demonstration by Turkewitz, O'Leary, and Ironsmith (1975). In this study, highly disruptive children attending a tutorial class were first placed under a traditional token economy—a systematic extrinsic reward system in which appropriate academic and social behavior earned the children tokens that could later be redeemed for attractive tangible rewards. Subsequently, this extrinsic reward system was gradually modified and withdrawn. Initially, the tokens children earned were made contingent upon their own self-evaluations, but only when those self-evaluations corresponded to evaluations of their behavior made by adult raters. Subsequently, this "accuracy of evaluation" contingency was gradually faded out until the children had complete control over their earning of rewards. Finally, the entire system of tangible rewards was gradually eliminated. The results, compared to findings obtained in previous research employing only the tangible token economy, suggested greater generalization of behavior change to a setting in which rewards were not contingent upon the target behaviors as a function of the introduction of this training program.

Although generated, quite obviously, within a very different theoretical framework, research along these lines seems also consistent with the general analysis presented in this chapter. Indeed, the parallels with our own work on the potential detrimental effects of unnecessarily powerful extrinsic incentives on subsequent intrinsic interest is illustrated by findings in our own laboratories (Lepper, Sagotsky, & Greene, 1982b) and else-

where (Brownell, Colletti, Ersner-Hershfield, Hershfield, & Wilson, 1977; Enzle & Look, 1980; Weiner & Dubanoski, 1975) that suggest that providing children with some measure of control over the application of an extrinsic contingency system to their own behavior will result in greater maintenance of later intrinsic interest.

Again, there are a large number of interesting questions yet to be explored. In a sense, one might view this applied work as an attempt to program and explicitly accelerate the "normal" developmental shift from a reliance on external constraints and criteria of evaluation to self-imposed standards and self-generated evaluations that will later affect one's behavior even in the absence of further external surveillance or extrinsic pressures. The introduction of more "cognitive" manipulations into such a procedure in an attempt to enhance the generalization of behavior changes obtained even further would appear a rich field for additional study.

Limitations of the present model

The foregoing speculations indicate some of the directions in which an attributional analysis might have implications for traditional issues in the study of socialization. It is equally important to be clear, however, about some of the more evident limitations of the present analysis.

Specific versus general concepts of internalization. In the first place, as emphasized throughout this chapter, an attributional analysis does not pretend to provide a complete account of the processes that contribute to children's internalization of social standards and values. To make this point more salient, however, it is important to recognize the difference between the "internalization" of specific attitudes or responses in the sense used in the present chapter and "internalization" in the broader sense of the development of a coherent and interrelated set of values and principles (cf. Kohlberg, 1969, 1971). Certainly the model presented in this chapter does not provide an analysis of the long-term developmental processes by which children do come to develop consistent value systems and moral ideologies. There can be no doubt, for example, that there is more to the use of inductive disciplinary techniques than the absence of salient coercion and constraint. Providing the child with information about, and drawing attention to, the consequences of one's actions for other persons and to issues of fairness, justice, or consideration must, in and of itself, have important effects on the child's attitudes and later behavior. The use of power-assertive techniques, likewise, involves a

number of potentially significant components: the provision of parental models of aggression and the arousal of strong emotional reactions, in addition to feelings of external control. The present thesis is simply that other factors, particularly children's attributions concerning the reasons for their actions, may also contribute to the relative effectiveness or ineffectiveness of such techniques.

Reward versus punishment. Similarly, for purposes of exposition, the present analysis has emphasized the parallels between the effects of promise of reward and threat of punishment, as well as the parallels between attempts to induce a child to display a particular pattern of behavior and attempts to prevent a child from displaying a particular response. In so doing, it has glossed over some potentially significant differences between these different techniques and goals of social control (cf. Lepper, 1981). One might argue, for instance, that situations involving attempts to instigate a particular response are inherently more complex than situations involving attempts to inhibit a particular response. Inevitably, the former case entails a variety of issues concerning the nature, intensity, and frequency of the response produced that often do not arise in the latter case. In like fashion, one can easily point to a number of differences generally associated with the use of rewards versus punishments: the affective tone of the interaction, the social models provided, or the extent to which children are provided with information concerning their relative competence. Probably there are important differences, as well, in the contexts in which each of these forms of social control is likely to be used (cf. Lewin, 1935). Nor has this chapter provided a detailed analysis of the factors that are likely to produce attributions of behavior to either intrinsic or extrinsic sources, although it seems likely that there are important differences in the conditions under which the use of rewards and the use of punishment will be likely to produce attributions of control or constraint. In any more complete analysis, such differences would require further attention (cf. Lepper, 1981; Lepper & Greene, 1978).⁹

The reciprocity of social interactions. A third simplifying assumption inherent in the present chapter involves a focus on the effects of parental practices on the child and a relative inattention to the effects of the child's behavior on the parent. Although one might argue that such a focus is not without justification (cf. Hoffman, 1975b), it is evident that the reciprocal and interactive nature of social exchanges between parent and child requires further consideration (Bandura, 1978; Bell, 1968).

Consider the definition of a child's response to an adult request or demand as either compliant or noncompliant. In this chapter I have

treated the distinction as self-evident; but, in many cases, the seeming simplicity of this judgment may be misleading. Often, the definition of whether a child has satisfactorily complied with a request (e.g., to practice the piano or to clean one's room) will involve more complex decisions about what constitutes "substantial compliance." Does pushing everything under the bed or into the closet constitute cleaning up one's room? Can a board game in progress be left on the floor? And so forth. The answer to questions of this sort may depend not only on the parent's initial intentions and goals but also on a complex and interactive process of negotiation and compromise between parent and child—a process that will clearly have important consequences for the child's feelings and perceptions of personal control and external constraint.

Perhaps more important, this chapter has touched only briefly—in terms of the escalation and de-escalation of social controls—on the ways in which previous patterns of interaction between parents and children may have a persistent influence on the nature of the social-control techniques that will prove sufficient to obtain initial compliance from the child. Presumably, the hypothetical level of external pressure that will be minimally sufficient to induce compliance will vary, across families and across situations within a family unit, as a function of a number of obvious individual and situational variables. These factors would include chronic or temperamental differences in children's general willingness to comply with parental requests, the child's mood at the time of the request, the inherent attractiveness or aversiveness of the behavior requested of the child, and the salient alternatives to compliance at that time, as well as the child's expectations concerning the immediate consequences of compliance versus noncompliance. It may also vary, however, as a function of the general emotional relationship between parent and child. Maccoby (1980, and this volume) and others (Matas, Arend, & Sroufe, 1978) suggest that an early history of secure attachment and positive interaction in the first years of life may make it more likely that the child will later comply more readily with parental requests in the face of relatively minimal external pressures. The presence and strength of early affective bonds, in this view, may predispose families toward entry into longer-term patterns either of relatively harmonious social interactions or of cycles of escalating mutual coercion.

The role of identification. This last possibility brings us to the final, and perhaps most significant, limitation of the present analysis. In essence, this chapter has ignored the role of "identification"—the third of Kelman's (1958) processes of attitude change and the subject of an enormous amount of developmental research (e.g., Bronfenbrenner, 1960; Hoff-

man, 1971; Kagan, 1958)—and has focused instead on the two “extreme” cases of compliance versus internalization. The present approach, therefore, deals only tangentially with issues of the relative effectiveness of different techniques of social control as a function of the broader context of the affective atmosphere of the home and the history of interaction patterns in the family.

There is also, however, a second important limitation posed by our lack of attention to processes of identification. Even within the more limited realm of experimental research considered in this chapter, one cannot ignore the fact that social-control attempts typically carry implications about the evaluation placed upon the behaviors in question by the socializing agent. To take a simple example from our own research concerned with the conditions under which the use of superfluous extrinsic rewards can be shown to produce decrements in subsequent intrinsic interest (Lepper, Sagotsky, & Greene, 1982a), we have found that the consequences of exposure to a systematic reinforcement program will appear to be quite different as a function of the setting in which the child's subsequent behavior is observed. In this study, we observed the behavior of children who had been previously exposed to a differential-reward system or to a variety of nondifferential-reward or control procedures in two subsequent settings after the reward system had been withdrawn. When children's behavior was observed unobtrusively in their regular classrooms, without their knowledge that their responses were being monitored and in the absence of further social pressures, significant decreases in intrinsic interest in the previously rewarded activity were observed for subjects in the differential-reward condition. When these same children were observed instead in an experimental context in which they knew that their responses were being observed (and in which we had independent evidence that the children perceived that differential social demands were associated with the target activity), they showed higher levels of engagement in the activity for which they had previously been rewarded.¹⁰

The present analysis, then, is incomplete in a number of important respects. The point of presenting it, despite these difficulties, is to suggest both the directions in which further research would need to go to refine this general analysis and some of the potential heuristic benefits of such an approach to the study of the socialization process.

Internalization as a criterion of socialization: a postscript

To extend this final point one step further, it may be useful to close this chapter with a brief consideration of some potential developmental and societal limitations to the general concept of internalization as a hallmark

of successful socialization. The basic argument, simply stated, is that there may be contexts in which issues of internalization, in both the narrow and the broad senses in which we typically use them, are potentially irrelevant.

This is perhaps most obvious when one thinks about internalization in the more specific sense—the internalization of specific values, goals, or prohibitions. Many tasks that parents set for children, whether for the benefit of parent or child, are inherently dull and boring; and in no sense is the parent's goal to induce the child to enjoy or cherish the task. The child need not learn to love mowing the lawn; it is simply a task that requires doing periodically. In such cases, mere compliance is satisfactory; immediate functional control over the child's behavior is quite sufficient.

These sorts of issues become considerably more interesting, however, when one considers internalization in the broader sense. Implicit in the central role we typically assign to internalization as a criterion for evaluating the effectiveness of the socialization process are two basic presuppositions. The first is that children will frequently be exposed to different, and often conflicting, attitudes, values, or patterns of behavior in different situations and in their interactions with different individuals. We tend to think of internalized values and standards as serving the function, in short, of maintaining particular patterns of response in the face of conflicting social pressures and examples. Perhaps more important, we also implicitly presume that children will often be faced with situations and contexts in which they are not under the direct or immediate control of adult socializing agents or the larger society in which they live. Were this not the case—were a parent, or a policeman, constantly by the child's side—our concern with the child's personal acceptance of parental or societal standards would surely be lessened. Indeed, it is precisely this distinction that is illuminated by much of the experimental work discussed in this chapter. Systems of social control that may be perfectly sufficient to control children's behavior within the settings in which the system is operative do not necessarily produce comparable effects, and may produce opposite effects, on behavior in other settings in which those controls are no longer functional (Lepper & Greene, 1978a, 1978b).

In our own culture, of course, it is easy to document the applicability of both these presuppositions. A central focus on the processes that underlie internalization of social and moral values seems highly appropriate. Similar considerations should also apply to other complex and pluralistic societies. The question of interest, however, concerns the applicability of such an analysis to contexts in which these conditions are not met or are at least less important.

To dramatize the case, imagine a society in which children (or adults,

for that matter) are under constant "surveillance" and rarely, if ever, face situations in which they believe they could violate societal standards without detection and retribution. Under such circumstances, a student of socialization might be considerably less interested in the process of internalization than in the process by which surveillance and functional control are maintained. Of course, there are no societies in which this is completely true; some, however, may approximate this template more than our own society does. On the one hand, one might consider small and reasonably self-sufficient societies in which each member is known to all other members of the society and in which the behavior of any member is the joint concern of the entire community (cf. Gadlin, 1978; Morgan, 1956; Whiting & Whiting, 1975). On the other, one can imagine more complex and industrialized societies—perhaps the Soviet Union or the People's Republic of China (Bronfenbrenner, 1970; Kessen, 1975) would be examples—in which relatively more pervasive systems of institutional control and mutual monitoring are employed to maintain a generally accepted ideological structure. In such contexts, it might be the case that the use of social-control techniques hypothesized to promote internalization—even if the principles underlying the present analysis were entirely general—would prove less important than the use of techniques that would promote identification with shared societal values or simple compliance with those values in the face of continued external surveillance and control.¹¹

Similar issues may also be relevant in considering potential differences in the effectiveness of different socialization techniques at different ages within a given culture. There is, for example, some experimental evidence to suggest that harsh physical punishment for transgressions by 2-year-olds in our own society may have positive rather than negative effects on the "internalization" of self-control (cf. Lytton, 1977; Lytton & Zwirner, 1975). Such findings contrast sharply with the results of studies with older children considered earlier. Such differential effects of disciplinary techniques as a function of the age of the child, however, make some sense if one considers the fact that the average 2-year-old both spends very little time in settings outside the surveillance and control of adult socializing agents and may lack the cognitive capacity to distinguish clearly between settings in which it is possible to "get away" with something without being caught and those in which detection is unavoidable (cf. Piaget, 1932; Solidus 1965).

The important point, in both these cases, is that the relevance of internalization as a criterion of socialization may vary as a function of the larger social and societal context in which we can observe the effects of

different socialization techniques. One cannot sensibly examine questions concerning the potential differential effects of different socialization techniques without attention to the cultural context in which those techniques are employed.

Notes

- 1 This proposed analogy between the processes that underlie attitude change with adults in a short-term persuasive communication context and the processes that may underlie the formation and internalization of more general social values and patterns of behavior in the context of parent-child relationships entails a number of assumptions regarding the continuity of social-influence processes across large differences in the scale of interventions, outcomes, and social relationships involved. A number of these issues will be considered more fully in later sections of this chapter.
- 2 Several comments may be helpful in understanding this figure and those following. First, it should be noted that the abscissa involves an inherently relative scale in which the perceived sufficiency of external pressures is assumed to depend both on the salience and amount of external pressure actually applied and the amount of external pressure that would have been necessary, in that situation, to produce the response that one is attempting to elicit or suppress. Thus, the points at which the external pressure applied will be just barely sufficient to produce compliance—i.e., the two points indicated as "X's" in Figure 1—will have different absolute values as a function of the inherent aversiveness or attractiveness of the response requested of the person in that setting. Finally, the diagonal lines used to represent the relationship between external pressure and attitude change are intended to represent only monotonic (and not necessarily linear) relationships between these two variables.
- 3 Even the use of expected and contingent tangible rewards in such contexts, however, will not always lead to decreases in later intrinsic interest. Of perhaps greatest interest, "performance-contingent" rewards (i.e., rewards presented as contingent upon some specifiable standard of excellence of performance, in either absolute or relative terms) frequently appear less likely to undermine subsequent intrinsic interest than "task-contingent" rewards (i.e., rewards that are presented as contingent upon task engagement per se) (cf. Boggiano & Ruble, 1979; Karniol & Ross, 1977). More detailed discussions of this distinction and other limiting conditions of this phenomenon appear elsewhere (Lepper, 1981; Lepper & Gilovich, 1981; Lepper & Greene, 1978b).
- 4 Again, it should be emphasized that the definition of any particular set of extrinsic pressures as either objectively insufficient, psychologically "insufficient," or psychologically "oversufficient" will depend upon the response being requested. Figure 2 is presented in its current form, however, to illustrate the relevance of these three cases under conditions in which the agent of influence wishes to induce a response or to inhibit a response. Prototypic examples of the six different possibilities delineated by the vertical lines in Figure 2 would include, from the far left to the far right, Lepper (1973), Aronson and Carlsmith (1963), Aronson and Mills (1959), Darley and Cooper (1972), Festinger and Carlsmith (1959), and Lepper, Greene, and Nisbett (1973). As indicated in the text, however, neither the Aronson and Mills (1959) nor the Lepper (1973) study provides the most direct tests that might be designed to evaluate the present model.
- 5 Although these issues have received attention primarily with regard to the literature concerned with the effects of oversufficient justification, it should be clear that these same considerations, and accompanying *ceteris paribus* assumptions, apply in principle to

- all the experimental paradigms discussed. Note, however, that there may be some inherent asymmetry between cases in which an attempt is made to induce a response and cases in which an attempt is made to prohibit a response. Inducing the child to engage in a particular activity, in particular, seems much more likely to introduce additional variables—e.g., potential differences in the nature of task performance, the acquisition of further skills, increased familiarity with the task, or changes in perceptions of personal competence or incompetence at the task—than prohibiting the child from engaging in a particular activity.
- 6 Two additional points regarding Hoffman's analysis should be noted. First, it should be made clear that any discussion of distinctive disciplinary styles represents a considerable simplification of a complicated topic. Not only is the categorization itself complex. There is, in addition, considerable evidence that parental practices are neither as simple nor as well differentiated as a straightforward reading of this typology might suggest (cf. Clifford, 1959; Grusec & Kuczynski, 1977; Hoffman, 1970b, 1971). Virtually all parents make some use of each of these techniques in particular situations and display different reactions to different classes of transgressions. Similarly, parents often use multiple techniques simultaneously in response to particular problematic behaviors. Differences across families, then, are clearly a matter of degree. Second, it should also be noted that these data on parental uses of different disciplinary techniques have typically been obtained in a context in which a transgression has already occurred. Thus, the present analysis rests, in part, on the assumption that the techniques used by parents to attempt to induce compliance will be closely related to the techniques they employ in response to transgression or noncompliance.
 - 7 Again, it should be made clear that the present argument is not that attributional processes are the only important determinants of the escalation and de-escalation of social-control exchanges. In many cases, depending upon the nature of the outcomes experienced by the parties involved, a straightforward reinforcement account can also be offered to explain such effects. Teasing apart these two possibilities would require analysis on a much more specific, and molecular, level.
 - 8 Although I have attempted to distinguish here between techniques that involve enhancing "actual control" from those involving the production of a mere "illusion of control," it should be clear that this distinction will often be a matter of degree. Even differences between suggestive and directive techniques or between modeling and direct instruction may be "illusory" in the sense that equivalent levels of initial compliance would be obtained in both cases. On the other hand, the provision of seemingly minor choices to children may make a substantial difference in the extent to which they will actually find the activity aversive.
 - 9 Other additional complexities are also likely. Presumably, in a long-term sense, it should make a considerable difference whether the parent's behavior, and use of incentives and sanctions, is consistent or inconsistent across time and situations. It would not be surprising, moreover, if consistency of response proved to be correlated with characteristics of persons or situations that would lead to a reliance on rewards versus punishments.
 - 10 This, of course, is one major reason why one would not wish to draw conclusions concerning internalization from subsequent behavior exhibited in the same situation (e.g., the home or the classroom) in which tangible rewards and punishments were previously administered, unless one could independently demonstrate that the child no longer expected the target behavior to be instrumental in gaining either further tangible rewards or continued social reinforcement and approval.
 - 11 It would be easy, and inappropriate, to overstate the point being made here. The claim is not that internalization will not occur in other cultures that differ along these dimen-

sions or that the examples cited are even close approximations to some hypothetical society in which dissent is nonexistent and surveillance ubiquitous. It is, rather, that the structure of our society makes issues of internalized controls over action particularly important in determining the individual's conduct in the face of frequent exposure to conflicting pressures and relatively ineffective sanctions for promoting compliance with societal standards. In the same sense, this analysis should make clear the relative irrelevance, within our own society, of the present approach to issues concerning the child's adoption of nearly universal social conventions (e.g., eating with utensils) that do not arouse salient conflicts—either between the individual's selfish interests and the interests of society or among different members or groups within the society.

References

- Amabile, T. M. Effects of external evaluation on artistic creativity. *Journal of Personality and Social Psychology*, 1979, 37, 221-233.
- Amabile, T. M., DeJong, W., & Lepper, M. R. Effects of externally-imposed deadlines on subsequent intrinsic motivation. *Journal of Personality and Social Psychology*, 1976, 34, 92-98.
- Aronfreed, J. *Conduct and conscience: The socialization of internalized control over behavior*. New York: Academic Press, 1968.
- Aronson, E. The psychology of insufficient justification: An analysis of some conflicting data. In S. Feldman (Ed.), *Cognitive consistency*. New York: Academic Press, 1966.
- Aronson, E. The theory of cognitive dissonance: A current perspective. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 4). New York: Academic Press, 1969.
- Aronson, E., & Carlsmith, J. M. The effect of the severity of threat on the devaluation of forbidden behavior. *Journal of Abnormal and Social Psychology*, 1963, 66, 584-588.
- Aronson, E., & Mills, J. The effects of severity of initiation on liking for a group. *Journal of Abnormal and Social Psychology* 1959, 59, 177-181.
- Bandura, A. The self-system in reciprocal determinism. *American Psychologist*, 1978, 33, 344-358.
- Baumrind, D. Child care practices anteceding three patterns of preschool behavior. *Genetic Psychology Monographs*, 1967, 75, 43-88.
- Baumrind, D. Current patterns of parental authority. *Developmental Psychology Monographs*, 1971, 4 (1, Pt. 2):1-103. (a)
- Baumrind, D. Harmonious parents and their preschool children. *Developmental Psychology*, 1971, 4, 99-102. (b)
- Baumrind, D. From each according to her ability. *School Review*, 1972, 80, 161-197.
- Baumrind, D. The development of instrumental competence through socialization. In A. D. Pick (Ed.), *Minnesota Symposium on Child Psychology* (Vol. 7). Minneapolis: University of Minnesota Press, 1973.
- Bee, H. Parent-child interaction and distractibility in nine-year-old children. *Merrill-Palmer Quarterly of Behavior and Development*, 1967, 13, 175-190.
- Bell, R. Q. A reinterpretation of the direction of effects in studies of socialization. *Psychological Review*, 1968, 75, 81-95.
- Bem, D. J. Self-perception: An alternative interpretation of cognitive dissonance phenomena. *Psychological Review*, 1967, 74, 183-200.
- Bem, D. J. Self-perception theory. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 6). New York: Academic Press, 1972.

- Biaggio, A., & Rodrigues, A. Behavioral compliance and devaluation of the forbidden object as a function of probability of detection and severity of threat. *Developmental Psychology*, 1971, 4, 320-323.
- Boggiano, A. K., & Ruble, D. N. Competence and the overjustification effect: A developmental study. *Journal of Personality and Social Psychology*, 1979, 37, 1462-1468.
- Bronfenbrenner, U. Freudian theories of identification and their derivatives. *Child Development*, 1960, 31, 15-40.
- Bronfenbrenner, U. *Two worlds of childhood: U.S. and U.S.S.R.* New York: Basic Books, 1970.
- Brownell, K., Colletti, G., Ersner-Hershfield, R., Hershfield, S. M., & Wilson, G. T. Self-control in school children: Stringency and leniency in self-determined and externally-imposed performance standards. *Behavior Therapy*, 1977, 8, 442-455.
- Bruner, J. S. *On knowing: Essays for the left hand.* Cambridge, Mass.: Harvard University Press, 1962.
- Bruner, J. S. *Toward a theory of instruction.* Cambridge, Mass.: Harvard University Press, 1966.
- Calder, B. J., Ross, M., & Insko, C. A. Attitude change and attitude attribution: Effects of incentive, choice, and consequences. *Journal of Personality and Social Psychology*, 1973, 25, 84-89.
- Cann, A., Sherman, S. J., & Elkes, R. Effects of initial request size and timing of a second request on compliance: The foot in the door and the door in the face. *Journal of Personality and Social Psychology*, 1975, 32, 774-782.
- Clifford, E. Discipline in the home: A controlled observational study of parental practices. *Journal of Genetic Psychology*, 1959, 95, 45-82.
- Collins, B. E., & Hoyt, M. F. Personal responsibility-for-consequences: An integration and extension of the "forced compliance" literature. *Journal of Experimental Social Psychology*, 1972, 8, 558-593.
- Condry, J. C. Enemies of exploration: Self-initiated versus other-initiated learning. *Journal of Personality and Social Psychology*, 1977, 35, 459-477.
- Condry, J., & Chambers, J. Intrinsic motivation and the process of learning. In M. R. Lepper & D. Greene (Eds.), *The hidden costs of reward.* Hillsdale, N.J.: Erlbaum, 1978.
- Damon, W. *The social world of the child.* San Francisco: Jossey-Bass, 1977.
- Darley, S. A., & Cooper, J. Cognitive consequences of forced noncompliance. *Journal of Personality and Social Psychology*, 1972, 24, 321-326.
- DeJong, W. An examination of self-perception mediation of the foot-in-the-door effect. *Journal of Personality and Social Psychology*, 1979, 37, 2221-2239.
- Dienstbier, R. A., Hillman, D., Lehnhoff, J., Hillman, J., & Valkenaar, M. C. An emotion-attribution approach to moral behavior: Interfacing cognitive and avoidance theories of moral development. *Psychological Review*, 1975, 82, 229-315.
- Drabman, R. S., Spitalnik, R., & O'Leary, K. D. Teaching self-control to disruptive children. *Journal of Abnormal Psychology*, 1973, 82, 10-16.
- Enzle, M. E., & Look, S. C. *Self versus other reward administration and the overjustification effect.* Unpublished manuscript, University of Alberta, 1980.
- Fazio, R. H., Zanna, M. P., & Cooper, J. Dissonance vs. self-perception: An integrative view of each theory's proper domain of application. *Journal of Experimental Social Psychology*, 1977, 5, 464-479.
- Festinger, L. *A theory of cognitive dissonance.* Stanford, Calif.: Stanford University Press, 1957.
- Festinger, L., & Carlsmith, J. M. Cognitive consequences of forced compliance. *Journal of Abnormal and Social Psychology*, 1959, 58, 203-210.

- Freedman, J. L. Long-term behavioral effects of cognitive dissonance. *Journal of Experimental Social Psychology*, 1965, 1, 145-155.
- Freedman, J. L., & Fraser, S. C. Compliance without pressure: The foot-in-the-door technique. *Journal of Personality and Social Psychology*, 1966, 4, 195-202.
- Gadlin, H. Child discipline and the pursuit of self: An historical interpretation. In H. W. Reese & L. P. Lipsitt (Eds.), *Advances in child development and behavior* (Vol. 12). New York: Academic Press, 1978.
- Gerard, H. B., & Mathewson, G. C. The effects of severity of initiation on liking for a group: A replication. *Journal of Experimental Social Psychology*, 1966, 2, 278-287.
- Greenwald, A. G. On the inconclusiveness of "crucial" cognitive tests of dissonance versus self-perception theories. *Journal of Experimental Social Psychology*, 1975, 11, 490-499.
- Grusec, J. E., & Kuczynski, L. Teaching children to punish themselves and effects on subsequent compliance. *Child Development*, 1977, 48, 1296-1300.
- Grusec, J. E., Kuczynski, L., Rushton, J. P., & Simutis, Z. M. Modeling, direct instruction, and attributions: Effects on altruism. *Developmental Psychology*, 1978, 14, 51-57.
- Hoffman, M. L. Conscience, personality, and socialization techniques. *Human Development*, 1970, 13, 90-126. (a)
- Hoffman, M. L. Moral development. In P. H. Mussen (Ed.), *Carmichael's manual of child psychology* (Vol. 2). New York: Wiley, 1970. (b)
- Hoffman, M. L. Identification and conscience development. *Child Development*, 1971, 42, 1071-1082.
- Hoffman, M. L. Altruistic behavior and the parent-child relationship. *Journal of Personality and Social Psychology*, 1975, 31, 937-943. (a)
- Hoffman, M. L. Moral internalization, parental power, and the nature of parent-child interaction. *Developmental Psychology*, 1975, 11, 228-239. (b)
- Hoffman, M. L., & Saltzstein, H. D. Parent discipline and the child's moral development. *Journal of Personality and Social Psychology*, 1967, 5, 45-57.
- Johnson, E. J., Greene, D., & Carroll, J. S. *Overjustification and reasons: A test of the means-ends analysis.* Unpublished manuscript, Carnegie-Mellon University, 1980.
- Kagen, J. The concept of identification. *Psychological Review*, 1958, 65, 296-305.
- Karniol, R., & Ross, M. The effect of performance-relevant and performance-irrelevant rewards on children's intrinsic motivation. *Child Development*, 1977, 48, 482-487.
- Kelley, H. H. Attribution theory in social psychology. In D. Levine (Ed.), *Nebraska Symposium on Motivation* (Vol. 15). Lincoln: University of Nebraska Press, 1967.
- Kelley, H. H. The processes of causal attribution. *American Psychologist*, 1973, 28, 107-128.
- Kelman, H. C. Compliance, identification, and internalization: Three processes of opinion change. *Journal of Conflict Resolution*, 1958, 2, 51-60.
- Kelman, H. C. Processes of attitude change. *Public Opinion Quarterly*, 1961, 25, 57-78.
- Kessen, W. (Ed.) *Childhood in China.* New Haven, Conn.: Yale University Press, 1975.
- Kohlberg, L. Stage and sequence: The cognitive-developmental approach to socialization. In D. A. Goslin (Ed.), *Handbook of socialization theory and research.* Chicago: Rand McNally, 1969.
- Kohlberg, L. From is to ought: How to commit the naturalistic fallacy and get away with it in the study of moral development. In T. Mischel (Ed.), *Cognitive development and epistemology.* New York: Academic Press, 1971.
- Kraut, R. Effects of social labeling on giving to charity. *Journal of Experimental Social Psychology*, 1973, 9, 551-562.
- Kruglanski, A. W. Endogenous attribution and intrinsic motivation. In M. R. Lepper & D. Greene (Eds.), *The hidden costs of reward.* Hillsdale, N.J.: Erlbaum, 1978.
- Lamb, M. E., & Baumrind, D. Socialization and personality development in the preschool

- years. In M. E. Lamb (Ed.), *Social and personality development*. New York: Holt, Rinehart and Winston, 1978.
- Landauer, T. K., Carlsmith, J. M., & Lepper, M. R. Experimental analysis of the factors determining obedience of four-year-old children to adult females. *Child Development*, 1970, 41, 601-611.
- Lepper, M. R. Dissonance, self-perception, and honesty in children. *Journal of Personality and Social Psychology*, 1973, 25, 65-74.
- Lepper, M. R. Intrinsic and extrinsic motivation in children: Detrimental effects of superfluous social controls. In W. A. Collins (Ed.), *Minnesota Symposium on Child Psychology* (Vol. 14). Hillsdale, N.J.: Erlbaum, 1981.
- Lepper, M. R., & Gilovich, T. The multiple functions of reward: A social-developmental perspective. In S. S. Brehm, S. M. Kasson, & F. X. Gibbons (Eds.), *Developmental social psychology: Theory and research*. New York: Oxford University Press, 1981.
- Lepper, M. R., & Gilovich, T. Activity-oriented request strategies for promoting generalized compliance from children: On accentuating the positive. *Journal of Personality and Social Psychology*, 1982, 42, 248-259.
- Lepper, M. R., & Greene, D. Turning play into work: Effects of adult surveillance and extrinsic rewards on children's intrinsic motivation. *Journal of Personality and Social Psychology*, 1975, 31, 479-486.
- Lepper, M. R., & Greene, D. Divergent approaches to the study of rewards. In M. R. Lepper & D. Greene (Eds.), *The hidden costs of reward*. Hillsdale, N.J.: Erlbaum, 1978. (a)
- Lepper, M. R., & Greene, D. (Eds.), *The hidden costs of reward*. Hillsdale, N.J.: Erlbaum, 1978. (b)
- Lepper, M. R., & Greene, D. Overjustification research and beyond: Toward a means-ends analysis of intrinsic and extrinsic motivation. In M. R. Lepper & D. Greene (Eds.), *The hidden costs of reward*. Hillsdale, N.J.: Erlbaum, 1978. (c)
- Lepper, M. R., Greene, D., & Nisbett, R. E. Undermining children's intrinsic interest with extrinsic rewards: A test of the "overjustification" hypothesis. *Journal of Personality and Social Psychology*, 1973, 28, 129-137.
- Lepper, M. R., Sagotsky, G., Dafoe, J., & Greene, D. Consequences of superfluous social constraints: Effects on young children's social inferences and subsequent intrinsic interest. *Journal of Personality and Social Psychology*, 1982, 42, 51-65.
- Lepper, M. R., Sagotsky, G., & Greene, D. Overjustification effects following multiple-trial reinforcement procedures: Experimental evidence concerning the assessment of intrinsic interest. Unpublished manuscript, Stanford University, 1982. (a)
- Lepper, M. R., Sagotsky, G., & Greene, D. Self-determination, extrinsic rewards, and intrinsic interest in preschool children. Unpublished manuscript, Stanford University, 1982. (b)
- Lepper, M. R., Sagotsky, G., & Mailer, J. Generalization and persistence of effects of exposure to self-reinforcement models. *Child Development*, 1975, 46, 618-630.
- Lepper, M. R., Zanna, M. P., & Abelson, R. P. Cognitive irreversibility in a dissonance-reduction situation. *Journal of Personality and Social Psychology*, 1970, 16, 191-198.
- Lewin, K. *A dynamic theory of personality*. New York: McGraw-Hill, 1935.
- Lewin, K., Lippitt, R., & White, R. Patterns of aggressive behavior in experimentally created "social climates." *Journal of Social Psychology*, 1939, 10, 271-299.
- Loeb, R. C. Concomitants of boys' locus of control examined in parent-child interactions. *Developmental Psychology*, 1975, 11, 353-358.
- Lytton, H. Correlates of compliance and the rudiments of conscience in two-year-old-boys. *Canadian Journal of Behavioral Science*, 1977, 9, 242-251.

- Lytton, H., & Zwiner, W. Compliance and its controlling stimuli observed in a natural setting. *Developmental Psychology*, 1975, 11, 769-779.
- Maccoby, E. E. *Social development: Psychological growth and the parent-child relationship*. New York: Harcourt Brace Jovanovich, 1980.
- Maehr, M. L., & Stallings, W. M. Freedom from external evaluation. *Child Development*, 1972, 43, 177-185.
- Mahoney, M. J. Self-reward and self-monitoring techniques for weight control. *Behavior Therapy*, 1974, 5, 48-57.
- Matas, L., Arend, R. A., & Sroufe, L. A. Continuity of adaptation in the second year: The relationship between quality of attachment and later competence. *Child Development*, 1978, 49, 547-556.
- Miller, R. L., Brickman, P., & Bolen, D. Attribution versus persuasion as a means for modifying behavior. *Journal of Personality and Social Psychology*, 1975, 31, 430-441.
- Mills, J. Changes in moral attitudes following temptation. *Journal of Personality*, 1958, 26, 517-531.
- Minton, C., Kagan, J., & Levine, J. A. Maternal control and obedience in the two-year-old. *Child Development*, 1971, 42, 1873-1894.
- Morgan, E. S. *The puritan family*. Boston: Trustees of the Public Library, 1956.
- Nisbett, R. E., & Wilson, T. D. Telling more than we can know: Verbal reports on mental processes. *Psychological Review*, 1977, 84, 231-259.
- Patterson, G. R. *Contexts and reactions: An interactive approach to coercive family processes*. Englewood Cliffs, N.J.: Prentice-Hall, in press.
- Pepitone, A., McCauley, C., & Hammond, P. Change in attractiveness of forbidden toys as a function of severity of threat. *Journal of Experimental Social Psychology*, 1967, 3, 221-229.
- Perry, D. G., Perry, L. C., Bussey, K., English, D., & Arnold, G. Processes of attribution and children's self-punishment following misbehavior. *Child Development*, 1980, 51, 545-551.
- Piaget, J. *The moral judgment of the child*. New York: Free Press, 1965. (Originally published, 1932.)
- Pittman, T. S., Cooper, E. E., & Smith, T. W. Attribution of causality and the overjustification effect. *Personality and Social Psychology Bulletin*, 1977, 3, 280-283.
- Pittman, T. S., Davey, M. E., Alafat, K. A., Wetherill, K. V., & Wirsul, N. A. Informational vs. controlling verbal rewards, levels of surveillance, and intrinsic motivation. *Personality and Social Psychology Bulletin*, 1980, 6, 228-233.
- Pliner, P., Hart, H., Kohl, J., & Saari, D. Compliance without pressure: Some further data on the foot-in-the-door technique. *Journal of Experimental Social Psychology*, 1974, 10, 17-22.
- Rainey, R. G. The effects of directed vs. non-directed laboratory work on high school chemistry achievement. *Journal of Research in Science Teaching*, 1965, 3, 286-292.
- Rosenhan, D. Some origins of concern for others. In P. A. Mussen, J. Langer, & M. Covington (Eds.), *Trends and issues in developmental psychology*. New York: Holt, Rinehart and Winston, 1969.
- Ross, M., Karniol, R., & Rothstein, M. Reward contingency and intrinsic motivation in children: A test of the delay of gratification hypothesis. *Journal of Personality and Social Psychology*, 1976, 33, 442-447.
- Sears, R. R., Maccoby, E. E., & Levin, H. *Patterns of child rearing*. Evanston, Ill.: Row, Peterson, 1957.
- Sears, R. R., Rau, L., & Alpert, R. *Identification and child rearing*. Stanford, Calif.: Stanford University Press, 1965.

- Smith, W. F. *The effects of social and monetary rewards on intrinsic motivation*. Unpublished doctoral dissertation, Cornell University, 1976.
- Snyder, M., & Cunningham, M. R. To comply or not comply: Testing the self-perception explanation of the "foot-in-the-door" phenomenon. *Journal of Personality and Social Psychology*, 1975, 31, 64-67.
- Swann, W. B., Jr., & Pittman, T. S. Initiating play activity of children: The moderating influence of verbal cues on intrinsic motivation. *Child Development*, 1977, 48, 1125-1132.
- Toner, I. J., Moore, L. P., & Emmons, B. A. The effect of being labeled on subsequent self-control in children. *Child Development*, 1980, 51, 618-621.
- Turkewitz, H., O'Leary, K. D., & Ironsmith, M. Producing generalization of appropriate behavior through self-control. *Journal of Consulting and Clinical Psychology*, 1975, 43, 577-583.
- Uranowitz, S. W. Helping and self-attributions: A field experiment. *Journal of Personality and Social Psychology*, 1975, 31, 852-854.
- Weiner, H. R., & Dubanoski, R. A. Resistance to extinction as a function of self- or externally determined schedules of reinforcement. *Journal of Personality and Social Psychology*, 1975, 31, 905-910.
- Whiting, B. B., & Whiting, J. W. *Children of six cultures: A psycho-cultural analysis*. Cambridge, Mass.: Harvard University Press, 1975.
- Wicklund, R. A., & Brehm, J. W. *Perspectives on cognitive dissonance*. Hillsdale, N.J.: Erlbaum, 1976.
- Zanna, M. P., & Cooper, J. Dissonance and the attribution process. In J. H. Harvey, W. J. Ickes, & R. F. Kidd (Eds.), *New directions in attribution research* (Vol. 1). Hillsdale, N.J.: Erlbaum, 1976.
- Zanna, M. P., Lepper, M. R., & Abelson, R. P. Attentional mechanisms in children's devaluation of forbidden activity in a forced-compliance situation. *Journal of Personality and Social Psychology*, 1973, 28, 355-359.
- Zuckerman, M., Lazzaro, M. M., & Waldgeir, D. Undermining effects of the foot-in-the-door technique with extrinsic rewards. *Journal of Applied Social Psychology*, 1979, 9, 292-296.

Part IV

Commentary and overview